

5
L 58953-65 EFP(c)/EWT(1)/EEG(t) PI-4 IJP(c) GO/WW
ACCESSION NR: AT5010455 UR/3138/64/000/273/0001/0008 3!
29

AUTHORS: Verebryusov, V. S.; Veselovskiy, G. S.; Grashin, A. F.
Demidov, V. S.; Kuznetsov, Ye. V.; Kuznetsov, Ye. P.; Ponosov, A.K.;
Protasov, V. P.; Sergeyev, F. M.; Shalamov, Ya. Ya.

TITLE: Data on pp resonance with $Q = 148$ MeV

SOURCE: USSR. Gosudarstvennyy komitet po ispol'zovaniyu atomnoy energii. Institut teoreticheskoy i eksperimental'noy fiziki. Doklady no. 273, 1964, Dannyye o pp-rezonanse s $Q = 148$ Mev, 1-8

TOPIC TAGS: proton, proton resonance, diproton resonance, pion nucleon resonance, excitation energy

ABSTRACT: The authors present data on a possible new photon resonance with excitation energy 148 MeV. The photographs were obtained with a 17-liter bubble chamber filled with a freon mixture (without magnetic field), using the extracted beam of π^+ mesons of the OIYAI (Joint Institute of Nuclear Research) synchrocyclotron with energy $E_0 = 80$ MeV.

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ACCESSION NR: AT5010455

Absorption of positive pions with formation of 1, 2, and 3 heavy particles (p, d, etc.) was investigated. The meson energy at the instant of absorption was 60 ± 20 MeV. Distributions of the event with production of two particles shows peaks at excitation energy values of 148 and 128 MeV. The same spectrum plotted for more symmetrical stars shows the 148 MeV peak more clearly. It is shown that the spectra can contain, besides the distribution with respect to the diproton mass, also components due to pd, dd, and similar stars, which can be mistaken for pp stars. The 128-MeV peak may be due to the presence of pd stars. The results indicate the possible existence of a diproton resonance with excitation energy 148 ± 3 MeV and width ~ 5 MeV, and also a pd resonance with approximate excitation energy 143 ± 3 MeV and width ~ 5 MeV. Such resonances could be observed in the presence of πN resonance with mass 938 ± 150 MeV, producing 'hypernuclei' by interacting with other nucleons. Work on a direct observation of the Alikhakov for a discussion of the results.' Original article has:
2 figures

Card 2/3

L 58953-65
ACCESSION NR: AT5010455

ASSOCIATION: Institut teoreticheskoy i eksperimental'noy fiziki
GKAE (Institute of Theoretical and Experimental Physics, GKAE)

SUBMITTED: 01Aug64 ENCL: 00 SUB CODE: NP
NR REF Sov: 001 OTHER: 002

Card 3/3

ACC NR: A7008896

SOURCE CODE: UR/0000/66/000/000/0041/0047

AUTHOR: Demidov, V. S.; Kirillov-Ugryumov, V. G.; Ponosov, A. K.; Prctasov, V. P.;
Sergeyev, F. M.

ORG: none

TITLE: Elastic scattering of Pi-mesons by carbon at energies of 5-22 Mev

SOURCE: Moscow. Inzhenerno-fizicheskiy institut. Fizika elementarnykh chastits,
1966, 41-47

TOPIC TAGS: elastic scattering, pi meson, synchrocyclotron, angular distribution
SUB CODE: 20

ABSTRACT: The authors state that in their present undertaking they have succeeded to considerable extent in overcoming the procedural difficulties which have hitherto hindered the study of interactions of slow pi-mesons with complex nuclei. An investigation was made of the elastic scattering of pi-mesons of both signs with energies of 5-22 Mev by carbon C^{12} nuclei. The pi-mesons were recorded in propane bubble chambers exposed to pi-meson beams of the synchrocyclotron of the Joint Institute for Nuclear Research. The purpose of the work was to investigate properties of the potential of the nuclear interaction of a pi-meson with a light nucleus. Selected for the investigation were 8,727 positive and 19,576 negative pi-mesons stopped in the chambers. Certain corrections were made in the experimental data for computing the cross sections. The corrected statistical material was used to

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UDC: 539.1
0929 [70]

ACC NR: AT7008896

obtain the angular distributions of the elastic scattering of pi-mesons. The article lists the experimental values of the differential cross sections for energies of 5-8, 8-15, and 15-22 Mev in the case of positive mesons and 5-8 and 8-15 Mev for negative mesons. A phase-shift analysis was made by the least-squares method on a "Ural" digital computer and a comparison was made of the angular distributions for positive and negative pi-mesons in identical energy ranges. It was established that the potential of the nuclear interaction between a pi-meson and a carbon nucleus at energies 5-22 Mev corresponds to repulsive forces. The phase shifts and potential value which were found agree with data obtained in the investigation of pi-meson atoms and elementary meson-nucleon scattering. The authors express their thanks to A. I. Alikhanyan, L. P. Kotenko, Ye. P. Kuznetsov, and A. V. Samoylov for their help in the work and to Z. S. Galkina, V. A. Yeliseyeva, and Z. A. Volobuyeva for taking part in the measurements. Orig. art. has: 2 formulas and 3 tables. [JPRS]

Card 2/2

ACC NR: AT7008898

SOURCE CODE: UR/0000/66/000/000/0076/0082

AUTHGR: Alikhanyan, A. I.; Aleksanyan, A. S.; Verebryusov, V. S.; Veremeyev, M. N.;
Demidov, V. S.; Kirillov-Ugryumov, V. G.; Protasov, V. P.; Ponosov, A. K.;
Sergeyev, F. M.

ORG: none

TITLE: Bubble chamber designed to operate in a magnetic field

SOURCE: Moscow. Inzhenerno-fizicheskiy institut. Fizika elementarnykh chastits,
1966, 76-82

TOPIC TAGS: austenite steel, bubble chamber, pi meson, synchrotron, photography

SUB CODE: 20, 1A

ABSTRACT: The article describes a bubble chamber with an effective volume of 200 liters made of nonmagnetic austenite 1Kh18N9T steel and consisting of a permanent outer vessel and the working chamber proper located inside it. The design of the inner chamber, outer vessel, and expander is generally similar to that described in an earlier article by A. V. Bogomolov et al. The upper lid of the permanent vessel has six windows for photography. Differential three-stage valves are used for increasing pressure and for depressurization in the chamber. The working space of the chamber is illuminated by eight out of sixteen IFK-120 flash bulbs mounted in pairs on a special panel; the lighting system design also permits the use of IFP-4000 bulbs. The photographing is done on two standard aerial photographic films, with a sensitivity of 1200 GOST [Gosudarstvennyy Obshchesoyuznyy

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UDC: - 539.1.,

ACC NR: AT7008898

Standart; All-Union State Standard] units and 80 mm width, by two "Gidrorussar-4"-type objectives. During operation of the chamber chromatic aberration was observed, resulting in a ghost effect in the particle track image. This was eliminated by photo-graphin; in monochromatic light through an experimentally chosen orange light filter. The chamber is heated by three 2-kw electric heaters, with one of the heaters set directly on the inner chamber. There are two versions of thermostat system control. The first employs a standard contact thermometer mounted in the chamber casing. The second version employs an electrocontact manometer. The article includes a block diagram of the chamber's control circuit. The chamber was tested in operation with various working fluids: propane, a mixture of Freon-12 and Freon-13, a propane-ethane mixture, and propane-Freon and propane-ethane-Freon mixtures. The chamber is at present set up in an MG-12 magnet in the path of a beam of negative pi-mesons, 4 Gev in energy, of the proton synchrotron of ITTF [Institut teoreticheskoy i eksperimental'noy fiziki; Institute of Theoretical and Experimental Physics]. The actuation cycle of the chamber is 4 seconds. The authors express their thanks to Ye. V. Kuznetsov, Ye. P. Kuznetsov, M. G. Gornov, S. N. Ryumin, A. F. Falin, and E. S. Levonyan for their assistance and "valuable advise" and to Yu. A. Budagov for "useful discussions". Orig. art. has: 8 figures. [JPRS]

Card 2/2

L 11913-66 EWT(m)/T/EWA(m)-2

ACC NR: AP6001156

SOURCE CODE: UR/0367/65/002/003/0496/0500

AUTHOR: Veselovskiy, G. S.; Grashin, A. F.; Demidov, V. S.; Kuznetsov, Ye. P.; Ponosov, A. K.; Protasov, V. P.; Sergeyev, F. M.

ORG: Institute of Theoretical and Experimental Physics, GKIAE (Institut teoreticheskoy i eksperimental'noy fiziki)

TITLE: Production of slow pi mesons on light nuclei and the pi-pi interaction

SOURCE: Yadernaya fizika, v. 2, no. 3, 1965, 496-500

TOPIC TAGS: pi meson, pion pion interaction

ABSTRACT: The object of the study was to find the possible resonance states in a system composed of two π -mesons at low energies:

$$Q = M_{\pi\pi} - 2\mu = [(\omega_{\pi_1} + \omega_{\pi_2})^2 - (p_{\pi_1} + p_{\pi_2})^2]^{1/2} - 2\mu \leq \mu$$

μ being the mass of a π -meson. The statistical material was obtained by studying the production of slow π^\pm mesons upon collision of π^- mesons (initial momentum 2.8 GeV/sec) with nuclei of a freon mixture in a 17- and 200-liter bubble chambers. In analyzing the films, all those cases were selected which involved interaction between π -mesons and the nuclei of the working liquid, resulting in the formation of two or more slow π -mesons which stopped in the working substance of the chamber. The Q distributions of the bipion in the range $Q < 100$ MeV were obtained. The distribution for $\pi^+\pi^-$ pairs differs from that for $\pi^+\pi^+$ and

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L 11913-66
ACC NR: AP6001156

$\pi^-\pi^-$ pairs; this may be explained by the presence of a strong $\pi\pi$ interaction in the isotopic state $T = 0$. Orig. art. has: 5 figures.

SUB CODE: 20 / SUBM DATE: 03Jul64 / ORIG REF: 004 / OTH REF: 001

CO
Card 2/2

VESELOVSKY, G.S.; CRASHIN, A.F.; DEMIDOV, V.S.; KUZNETSOV, Ye.V. [deceased];
KUZNETSOV, Ye.P.; PONOSOV, A.K.; PROTASOV, V.P.; SERGEYEV, F.M.;
SHALAMOV, Ya.Ya.

Production of slow π -mesons on light nuclei, and $\bar{\pi}\pi$ -interaction.
IAd. fiz. 2 no.3:496-500 S '65. (MIRA 18:9)

1. Institut teoreticheskoy i eksperimental'noy fiziki
Gosudarstvennogo komiteta po ispol'zovaniyu atomnoy energii SSSR.

24 6600

38875

S/056/62/042/006/047/047
B104/B112

AUTHORS: Demidov, V. S., Kirillov-Ugryumov, V. G., Ponosov, A. K.,
Frotasov, V. P., Sergeyev, F. M.

TITLE: Elastic scattering of π^- mesons with energies of 5-12 Mev
by carbon nuclei

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 42,
no. 6, 1962, 1687-1688

TEXT: The experiments were made with a propane bubble chamber (dimensions, 370 by 140 by 100 mm³) exposed to the pion beam of the synchrocyclotron of the OIYaI. 19,576 π^- mesons, identified from the characteristic star at the end of their path, were selected to measure the angle of singly scattered π^- mesons projected onto the plane of the film. 81 π^- meson decay events were registered between 15 and 180°. The sign of the potential of the system pion - carbon nucleus can be determined directly from the difference between the angular distributions of π^+ and π^- mesons. There is 1 table.

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Elastic scattering of π^- mesons ...

S/056/62/042/006/047/047
B104/B112

ASSOCIATION: Moskovskiy inzhenerno-fizicheskiy institut (Moscow
Engineering Physics Institute)

SUBMITTED: April 23, 1962

f.

Card 2/2

N/5
756.1
.P9

Protasov, Vasiliy Semenovich

Ekonomika rechnogo transporta
[Economics of river transport, by]
V.S. Protasov [i] P. P. Sidorov.
Moskva, "Rechnoy Transport", 1958.

321 p. illus., charts, tables.

Bibliographical footnotes.

MAYORSKIY, Gennadiy Ivanovich; RODINA, Antonina Platonovna; PROTASOV,
V.S., retsaenzent; ZOTOVA, V.V., retsgenzent; MAKRUSHINA, A.N.,
red.izd-va; BOBROVA, V.A., tekhn.red.

[Inland water transportation rates] Tarify rechnogo transporta.
Moskva, Izd-vo "Rechnoi transport," 1959. 150 p. (MIRA 13:3)
(Inland water transportation--Rates)

"APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R001343320008-7

APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R001343320008-7"

PROTASOV, V.S.

Inland Navigation

Raising the training of mates to the level of tasks of the river fleet. Rech. transp.
12, No. 2, 1952.

9. Monthly List of Russian Accessions, Library of Congress, August 1952 ¹⁹⁵³ Uncl.

PROTASOV, V.S.

PROTASOV, V.S.

Training specialists for river transportation. Rech.transp. 16
no.11:20-21 N '57. (MIRA 10:12)

1. Nachal'nik upravleniya uchebnymi zavedeniyami Ministerstva
technogo flota.
(Inland water transportation) (Technical education)

DEMIDOV, V.S.; KIRILLOV-UGRYUMOV, V.G.; PONOSOV, A.K.; PROTASOV, V.P.;
SERGEYEV, F.M.

Elastic scattering of 5-15 Mev. π^- -mesons on carbon nuclei.
Zhur. eksp. i teor. fiz. 42 no.6:1687-1688 Je '62. (MIRA 15:9)

1. Moskovskiy inzhenerno-fizicheskiy institut.
(Mesons--Scattering)
(Carbon)

PROTASOV, V. P.

7
95S/089/62/013/006/019/027
B102/B186

AUTHORS: G. T. and M. R.

TITLE: Nauchnaya konferentsiya Moskovskogo inzhenerno-fizicheskogo
instituta (Scientific Conference of the Moscow Engineering
Physics Institute) 1962

PERIODICAL: Atomnaya energiya, v. 13, no. 6, 1962, 603 - 606

TEXT: The annual conference took place in May 1962 with more than 400
delegates participating. A review is given of these lectures that are
assumed to be of interest for the readers of Atomnaya energiya. They are
following: A. I. Leypunskiy, future of fast reactors; A. A. Vasil'yev,
design of accelerators for superhigh energies; I. Ya. Ponranchuk,
analyticity, unitarity, and asymptotic behavior of strong interactions at
high energies; A. B. Migdal, phenomenological theory for the many-body
problem; Yu. D. Fiveyskiy, deceleration of medium-energy antiprotons in
matter; Yu. M. Kogan, Ya. A. Iosilevskiy, theory of the Mössbauer effect;
M. I. Ryazanov, theory of ionization losses in nonhomogeneous medium;
Yu. B. Ivanov, A. A. Rukhadze, h-f conductivity of subcritical plasma;

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S/089/62/013/006/019/027
B102/B186

Nauchnaya konferentsiya...

Ye. Ye. Lovetskii, A. A. Rukhadze, electromagnetic waves in nonhomogeneous plasma; Yu. D. Kotov, I. L. Rozental', the origin of fast cosmic muons; Yu. M. Ivanov, muon depolarization in solids; V. G. Varlamov, Yu. M. Grashin, B. A. Dolgoshein, V. G. Kirillov-Ugryumov, V. S. Roganov, A. V. Samoylov, μ^- capture by various nuclei; V. S. Demidov, V. G. Kirillov-Ugryumov, A. K. Ponosov, V. P. Protasov, F. M. Sergeyev, scattering of π^- mesons at 5 - 15 Mev in a propane bubble chamber; S. Ya. Nikitin, M. S. Aynutdinov, Ya. M. Selektor, S. M. Zombkovskiy, A. F. Grashin, muon production in π^-p interactions; B. A. Dolgoshein, spark chambers; N. G. Volkov, V. K. Lyapidevskiy, I. M. Obodovskiy, study of operation of a convection chamber; K. G. Finogenov, production of square voltage pulses of high amplitudes; G. M. Alekseev, problems of color vision; V. K. Lyapidevskiy, relation between number of receivers and number of independent colors; Ye. M. Kudryavtsev, N. N. Sobolev, N. I. Tisengausen, L. M. Tunitskiy, P. S. Fayzulov, determination of the moment of electron transition of oscillator forces and the widths of the Schumann-Runge bands of molecular oxygen; B. Ye. Gavrilov, A. V. Zharikov, V. I. Rayko, decomposition of the volume charge of intense ion beams; Ye. A. Kramer-Agayev, V. S. Troshin, measurement of neutron spectra; G. G. Doroshenko, new methods of fast-neutron recording; V. I. Ivanov, dosimetry terminology; R. M. Voronkov,

Card 2/4

PROTASOV, Vasiliy Semenovich, SIDOROV, Pavel Petrovich, KOLOMOYTSHEV, V.P.
retsenzent, GUREVICH, Sh.M., retsenzent, ARSEN'IEV, S.P., red.;
IVANOV, L.A., red.; LOBANOV, Ye.M. red.izd-va.; YERMAKOVA, T.T.,
tekhn.red.

[Economics of river transportation] Ekonomika rechnogo transporta.
Moskva, Izd-vo "Rechnoi transport," 1958. 321 p. (MIRA 11:9)
(Inland water transportation)

PROTASOV, V. R.

PROTASOV, V. R. - "Investigation of Oogenesis in Volga Bream." Sub 7
Jan 53, Moscow Technical Inst of the Fish Industry and Economy imeni
A. I. Mikoyan. (Dissertation for the Degree of Candidate in
Biological Sciences).

SO: Vechernaya Moskva January-December 1952

* changed to Kalingrad (1958)

Protasov, L. N.
PROTASOV, V. R.

Reaction to light in some fishes of the Black Sea. Vop. ikht. no.9:
144-146 '57. (MIRA 11:1)

1. Institut morfologii zhivotnykh im. A.N. Severtsova Akademii nauk
SSSR.
(Black Sea--Fishes) (Light--Physiological effect)

PROTASOV, V.P.

Study of vision in fishes; brief methodological survey. Vop. ikht.
no.10:144-156 '58. (MIRA 11:10)

1.Institut merfologii zhivotnykh AN SSSR.
(Sense organs--Fishes) (Vision)

PROFIASOV, V.R. kand.biol.nauk

Electrophysiological study of vision in fishes. Trudy sov.Ikht.kom.
no.8:111-114 ' 58. (MIRA 11:11)

1. Institut morfologii zhivotnykh AN SSSR.
(Sense organs--Fishes) (Electrophysiology) (Vision)

PROTASOV, V. R. BORISOV, P. G.

" Some Aspects of Light Perception in Fish and Selective Light Sources"

report presented at the 48th Annual Meeting of the Council for Exploration
of the Sea, Moscow 19-28 Sept. 1960.

MALYUKINA, G.A.; PROTASOV, V.R. (Moskva)

Hearing, "voice," and reaction of fishes to sounds. Usp. soor.
biol. no. 2:229-242 S-0 '60. (MIRA 13:11)

(HEARING) (SENSE ORGANS—FISHES)
(SOUND PRODUCTION BY ANIMALS)

PROTASOV, V.R.; MITROKHIN, Yu.A.

Method for automatic estimation of migrating fish numbers by
size groups. Izv. AN SSSR. Ser. biol. no. 4:607-609 Jl-Ag
'60. (MIRA 13:8)

1. Institut morfologii zhivotnykh im. A.N. Severtsova
Akademii nauk SSSR.
(FISHES--MIGRATION)

PROTASOV, V.R.; GOLUBTSOV, K.V.

Some functional characteristics of the eye in the codfish (*Gadus morhua* (L.)) and the marine sculpin (*Myoxocephalus scorpius* (L.)).
Trudy Inst.morf.zhil. no.13:129-138 '60. (MIRA 13:6)
(Sense organs--Fishes)
(Vision)

PROTASOV, V.R.

Some functional characteristics of the retina in nine fish
species of the Barents Sea. Vop.ikht. no.14:139-155 '60.
(MIRA 13:8)

1. Laboratoriya ikhtiologii Instituta morfologii zhivotnykh im.
A.N.Seventsova Akademii nauk SSSR.
(Sense organs---Fishes)
(Retina)

PROTASOV, V.R.; ALTUKHOV, Yu.P.

Study of unconditioned opticomotor reflexes in some fishes. Trudy
Karad. biol. sta. no.16:132-142 '60. (MIRA 13:9)
(SENSE ORGANS—FISHES) (VISION)
(SPACE PERCEPTION)

PROTASOV, V.R.; ARONOV, M.I.

Biological significance of sounds produced by certain fishes of the
Black Sea. Biofizika 5 no. 6:750-752 '60. (MIRA 13:10)

1. Institut morfologii zhivotnykh imeni A.N. Severtsova AN SSSR,
Moskva i Sevastopol'skaya biologicheskaya stantsiya imeni akademika
A.O. Kovalevskogo, AN SSSR.
(FISHES—BEHAVIOR) (SOUND PRODUCTION BY ANIMALS)

R
PROTASOV, V.P., kand.biol.nauk

Voicee of fish. Priroda 49 no.9:96-98 S '60.

(MIRA 13:10)

1. Institut morfologii zhivotnykh AN SSSR, Moskva.
(Fishes) (Animal sounds)

PROTASOV, V.R.; ALTUKHOV, Yu.P.; KOVALEVA, N.D.

Morphofunctional characteristics of the transition from day vision
to twilight vision in some fishes of the Black Sea. Dokl.AN SSSR
134 no.1:195-198 S '60. (MIRA 13:8)

1. Institut morfologii zhivotnykh im. A.N. Severtsova Akademii
nauk SSR. Predstavлено акад. I.I. Shmal'gauzenom.
(SENSE ORGANS--FISHES)
(VISION)

PROTASOV, V.R.; ALTUKHOV, Yu.P.

Nature and mechanism of the reaction of fishes to artificial
light. Trudy Karad. biol. sta. no.17:3-6 '61. (MIRA 15:5)
(Fishes—Behavior) (Light—Physiological effect)

PROTASOV, V.R.

Some visual characteristics and their adaptive significance in the
life of nine fish species of the Black Sea. Trudy Inst. morf. zhiv.
no.39:72-95 '61. (MIRA 14:11)
(Sense organs--Fishes) (Vision)

PROTASOV, V.R.

Reactions of fishes to light as related to their light perception characteristics. Vop. ikht. 1 no.3:519-532 '61.
(MIRA 14:11)

1. Laboratoriya ikhtiologii Instituta morfologii zhivotnykh
imeni A.N. Severtsova AN SSSR.
(Electric fishing)
(Light—Physiological effect)

PROTASOV, V.R., kand.biolog.nauk

Vision in fish. Priroda 50 no.5:104-106 My '61. (MIRA 14:5)

1. Institut morfologii zhivotnykh im. A.N.Severtseva AN SSSR (Moskva).
(Fishes--Physiology) (Vision)

PRCTASOV, V.R.; ROMANENKO, Ye.V.

Nature of sounds produced by some fishes of the Black Sea. Dokl.
AN SSSR 139 no.3:726-728 Jl '61. (MIRA 14:7)

1. Institut morfologii zhivotnykh im. A.N. Severtsova AN SSSR
i Akusticheskiy institut AN SSSR. Predstavлено akademikom
N.N. Andreyevym.
(Fishes) (Sound productions by animals)

MITROKHIN, Yu.A.; PROTASOV, V.R.; ALTUKHOV, Yu.P.

Estimating the abundance of migratory fishes with regard to hydro-electric developments. Vop. ikht. 2 no.1:192-196 '62. (MIRA 15:3)

1. Gosudarstvennyy institut po proyektirovaniyu gidro-tehnicheskikh rybovodno-meliorativnykh i prudovykh sooruzheniy, Institut morfologii zhivotnykh AN SSSR i Akademiya nauk USSR.
(FISHWAYS)

PROTASOV, V.R.; ROMANENKO, Ye.V.

Sounds emitted by some fishes and their importance as signals.
Zool.shur. 41 no.10:1516-1528 O '62. (MIRA 15:12)

1. Institute of Animal Morphology, and Acoustic Institute,
Academy of Sciences of the U.S.S.R., Moscow.
(Fishes) (Sound production by animals)

PROTASOV, V.R., kand.biolg.nauk; ROMANENKO, Ye.V.

Sounds of the Black Sea crabs. Priroda 51 no.6:116-117 Je '62.
(MIRA 15:6)

1. Institut morfologii zhivotnykh im. A.N.Seventsova AN SSSR,
Moskva (for Protasov). 2. Akusticheskiy institut AN SSSR, Moskva
(for Romanenko).
(Crabs) (Sound production by animals)

"APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R001343320008-7

PROTASOV, V.R.; ROMANENKO, E.V. [Romanenko, Ye.V.]

The sounds uttered by some fishes and their signaling role. *Analele
biol* 17 no.3:74-87 My-Je '63.

APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R001343320008-7"

ROMANENKO, Ye.V. (Moskva); PROTASOV, V.R. (Moskva)

Sounds of beluga. Priroda 52 no.6:118-120 '63. (MIRA 16:6)
(Sturgeons) (Sound production by animals)

PROTASOV, V.R.; DARGOV, A.A.; MALTIN, L.K.

"Visual images" in the recognition and signalization of fish.
Izv. AN SSSR. Ser. biol. 31 no.1:59-75 Ja-F '66.

(MIRA 19:1)

I. Institut morfologii zhivotnykh im. A.N. Severtsova AN SSSR.
Submitted April 8, 1965.

PROTASOV, Vladimir Iustamovich; MANTEYFEL', B.P., ovt. red.;
GIDLEVICH, A.M., red.

[Bioacoustics of fishes] Bioakustika ryb. Moskva, Nauka,
1965. 206 p. (MIRA 18:9)

TSVETKOV, V.I.; PROTASOV, V.R.

Bionics and fishing. Priroda 53 no.2:128 '64.
(MIRA 17:2)

I. Institut morfologii zhivotnykh im. A.N. Severtsova AN SSSR,
Moskva.

MANTEYFEL', B.P.; PROTASOV, V.R.

Role of physics in studying fish behavior. Vop. ikht. 3
no.3:433-440 '63. (MIRA 16:10)

1. Laboratoriya ikhtiologii Instituta morfologii zhivotnykh imeni
A.N. Severtsova AN SSSR.
(Fishes—Behavior) (Ichthyological research)

S/056/63/044/004/004/044
B102/B186

AUTHORS: Demidov, V. S., Kirillov-Ugryumov, V. G., Ponosov, A. K.,
Protasov, V. P., Sergeyev, F. M.

TITLE: Absorption of stopped negative pions in carbon

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 44,
no. 4, 1963, 1144 - 1146

TEXT: Previously taken photographs (ZhETF, 42, 1689, 1962) of interactions of slow π^- in a 4-liter propane bubble chamber were now used to investigate the pion absorption by carbon nuclei. Among 3500 π^- stops there were 1130 selected for an analysis of the pion star distribution with respect to prongs, and 1180 two-pronged stars for investigating the distribution with respect to the angle between the prongs. If one assumes (Phys. Rev. 84, 258, 1951) that π^- are absorbed only by nucleon pairs (pn, pp), the absorption probability may be calculated. On comparing the experimental results with those calculated by the method of least squares, the π^- absorption probability by a pn-pair amounts to 70 - 80%, that for a pp-pair to 30 - 20%, and the probability of an intranuclear collision is 60 - 80%.

Card 1/2

Absorption of stopped negative...

S/056/63/044/004/004/044
B102/B186

The mean number of prongs was found to be 0.84 and the distribution of stars with respect to the angle between the prongs had a sharp maximum at about 180°. The results speak in favor of the two-nucleon absorption mechanism. The absorption probability is energy-independent in the range 0 - ~200 Mev. There are 1 figure and 1 table.

ASSOCIATION: Moskovskiy inzhenerno-fizicheskiy institut (Moscow Institute of Physical Engineering)

SUBMITTED: November 2, 1962

Card 2/2

PROTASOV, V.S.; GLADYSHEVSKIY, Ye.I.

Crystalline structure of the compound ScBe₅. Kristallografiia
9 no.2:267-268 Mr-Ap'64. (MiRA 17:5)

1. I'vovskiy gosudarstvennyy universitet imeni I. Franko.

L 58701-65 INT(1)/EWP(e)/EWT(m)/EWP(1)/EFF(n)-2/ENG(m)/EPR/T/EWP(t)/EWP(b)/
EEC(b)-2/EWA(c) Ps-4/Pt-4/Fu-4 IJP(c) JD/JG/CG/AT/WH

ACCESSION NR: AP5016586

UR/0363/65/001/005/0711/0714
546.631'261;548.19

AUTHOR: Dvorina, L. A.; Protasov, V. S.; Gladyshevskiy, Ye. I.

34
52
B

TITLE: Scandium monosilicide and its crystal structure

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 1, no. 5, 1965,
711-714

TOPIC TAGS: scandium silicide, silicide crystal structure, xray diffraction

ABSTRACT: Six alloys of scandium with silicon containing 40-80 at.% Si were prepared by electric arc fusion in He, annealing for 100 hr. at 800°C, then quenching in cold water. X-ray phase analysis revealed the existence of the monosilicide ScSi in addition to the already known compounds Sc₃Si₅ and Sc₅Si₃. These three silicides (and no others) were also obtained by reducing Sc₂O₃ with silicon at high temperatures. Powder analysis of ScSi gave the lattice constants $a = 3.99 \text{ \AA}$, $b = 9.86 \text{ \AA}$, $c = 3.65 \text{ \AA}$ (within $\pm 0.01 \text{ \AA}$). It was postulated that ScSi belongs to the structural type of CrB (space group Cmcm - D_{2h}¹⁷). Interatomic distances and coordination characteristics of the atoms in the ScSi structure are given, and the ratios of line intensities are plotted versus the

Card 1/2

L 58701-65

ACCESSION NO: AP5016586

parameters of the positions of the atoms. Orig. art. has: 1 figure, 3 tables,
and 3 formulas.

ASSOCIATION: L'vovskiy ordena Lenina gosudarstvenny universitet im. I. Franko
(Lvov State University); Institut problem materialovedeniya Akademii nauk
UkrSSR (Institute of Materials Science Problems, Academy of Sciences, UkrSSR)

SUBMITTED: 25Mar64

ENCL: 00

SUB CODE: IC, SS

NO REF SOV: 006

OTHER: 011

Card

2/2

L 58914-65 EWT(m)/EPR/T/EWP(t)/EWP(z)/EWP(b)/EWA(c) Pad/Ps-4 IJP(c) SD/
HW/JG

ACCESSION NR: AP5013823

UR/0021/65/000/005/0599/0601

AUTHOR: Teslyuk, M. Yu.; Protasov, V.S.

TITLE: Crystal structure of scandium-cobalt-aluminum and scandium-nickel-aluminum
ternary compounds

SOURCE: AN UkrRSR. Dopovid, no. 5, 1965, 599-601

TOPIC TAGS: scandium alloy, cobalt alloy, aluminum alloy, nickel alloy, crystal
structure analysis, xray diffraction analysis

ABSTRACT: To verify the assumption that ternary compounds are formed at the cross
sections between λ -phases of $ScCo_2$ and $ScAl_2$ as well as between $ScNi_2$ and $ScAl_2$,
 $ScCoAl$ and $ScNiAl$ alloys were prepared in a helium atmosphere electric furnace from
99.8 % pure Sc, 99.99 % pure Al, 99.9 % pure Co and 99.9 % Ni. The x-ray diffraction
measurements were made on powders prepared from the above alloys. $ScCoAl$ and
 $ScNiAl$ alloys produce lines identical in intensity and location, which can be indexed on
a hexagonal pattern with $c/a \approx 1.60$. The lattice constants obtained are $a = 5.10 \text{ \AA}$,
 $c = 8.20 \text{ \AA}$, $c/a = 1.61$ for $ScCoAl$ and $a = 5.12 \text{ \AA}$, $c = 8.20 \text{ \AA}$ $c/a = 1.60$ for $ScNiAl$.
"The experimental work was carried out by I.I. Dykyy." Orig. art. has: 2 tables.

Card 1/2

L 58914-65

ACCESSION NR: AP5013823

ASSOCIATION: L'vivs'kyy derzhavnyy universytet (L'vov State University)

SUBMITTED: 05Apr64

ENCL: 00

SUB CODE: MM

NO REF Sov: 002

OTHER: 010

dm
2/2

S/0021/64/000/002/0212/0215

ACCESSION NR: AP4012589

AUTHOR: Kry*p'yakevych, P. I.; Protasov, V. S.; Kuz'ma, Yu. B.

TITLE: Crystal structures of compounds of scandium with some transition metals

SOURCE: AN UkrRSR. Dopovidi, no. 2, 1964, 212-215

TOPIC TAGS: metals, alloys, steel, scandium, ScCo sub 2, zirconium-rhenium system, hafnium-rhenium system, scandium-rhenium system, X-ray diffraction Sc Mn sub 2

ABSTRACT: In former work by the authors (Dopovidi AN UkrRSR, 1963, 492) the structural analogy between the system Sc-Re, on the one hand, and the systems Zr-Re and Hf-Re, on the other hand, was established. In this instance the structure of alloys of Sc with Mn, Co, and Cu was investigated by the X-ray diffraction method. The existence of the following compounds was established and their structure determined: ScMn₂ (MgZn₂ type, $a = 5.03 \text{ \AA}$, $c = 8.19 \text{ \AA}$, $c/a = 1.63$); ScCo₂ (MgCu₂ type, $a = 6.89 \text{ \AA}$); ScCo (CsCl type, $a = 3.16 \text{ \AA}$); ScCu (CsCl type, $a = 3.24 \text{ \AA}$). The results obtained confirmed the correctness of the assumption, as far as compounds with a low Sc content are concerned, that there

Card 1/2

ACCESSION NR: AP4012589

is a crystal-chemical analogy between Sc, on the one hand, and Zr and Hf, on the other. Orig. art. has: 3 tables.

ASSOCIATION: L'viv's'ky'y Derzhavny'y Universy'tet (L'vov State University)

SUBMITTED: 31Jan63

DATE ACQ: 03Mar64

ENCL: 00

SUB CODE: ML, EL

NO REF Sov: 003

OTHER: 002

Card 2/2

"APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R001343320008-7

...; PROTASOV, V.S.

Crystal structure of ternary ScCoAl and ScNiAl compounds. Dop.
AN URSR no.5:599-601 '65.
(MIRA 18:5)

1. L'vovskiy gosudarstvennyy universitet.

APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R001343320008-7"

L 14772-65 EWT(m)/EWP(b) ASD(f)-2/ESD(gs) RDW/JD/JG/MLK

ACCESSION NR: AT4048708

S/0000/64/000/000/0153/0154

AUTHOR: Gladyshevskiy, Ye. I.; Kripyakevich, P. I.; Kuz'ma, Yu. B.; Protasov, B.
V. S.

TITLE: Double compounds of scandium with transition metals and beryllium

SOURCE: Vsesoyuznoye soveshchaniye po splavam redkikh metallov, 1963. Voprosy*
teorii i primeneniya redkozemel'nykh metallov (Problems in the theory and use
of rare-earth metals); materialy soveshchaniya. Moscow, Izd-vo Nauka, 1964,
153-154

TOPIC TAGS: scandium, scandium beryllium compound, beryllium, rare earth
element, transition element

ABSTRACT: Since data on only 10 Sc alloys with Mn and elements of the Fe, Co and
Ni groups had been published by 1962, the authors investigated several scandium
alloys containing Mn, Fe, Co, Ni, Cr and Re. They were prepared from scandium
(98.2% Sc, 0.1% rare earth metals, 0.69% Cu, 0.038% Fe, 0.036% Cr, 0.009% Mo),
electrolytic manganese and copper, iron carbonyl, cobalt, nickel and rhenium
(99.8% Re). The alloy was melted in an arc furnace or Tammann furnace in Al_2O_3
crucibles (in pure helium). X-ray analysis revealed the existence of ScMn_2 , ScCo_2
and ScNi_2 . For ScFe_2 , a MgCu_2 type structure was observed. Consequently, ScFe_2
Card 1/2

I 14772-65

ACCESSION NR: AT4048708

exists in two modifications. In the Sc-Re system, Sc_5Re_2 and Sc_5Re_{24} were found, analogously to the Zr-Re and Hf-Re systems. In the Sc-Co, Sc-Ni and Sc-Cu systems, ScR compounds of the CsCl type were found. In the Sc-Co and Sc-Ni systems there were compounds with a high scandium content of the Ti_2Ni type. In the Sc-Be system only one compound was previously known - $ScBe_{13}$ of the same type as $NaZn_{13}$, but current tests showed the existence of at least two compounds - $ScBe_5$ (CaCu₅ type) and $ScBe_{17}$ (hexagonal structure). Thus, in systems with Mn, Fe, Co, Ni, Re and Be, scandium forms the same compounds as Zr and Hf, due to the close values of the atomic radii of scandium, zirconium and hafnium.

ASSOCIATION: none

SUBMITTED: 13Jun64

ENCL: 00

SUB CODE: MM

NO REF Sov: 001

OTHER: 010

Card 2/2

L 23933-65 EPF(n)-2/EPR/EWT(m)/EWP(b)/EWP(e)/EWP(t) Ps-4/Pu-4 IJP(c)
AT/WR/JD/JG/MLK
ACCESSION NR: AT5002777

S/0000/64/000/000/0180/0180

AUTHOR: Kripyakevich, P. I.; Kuz'ma, Yu. B.; Protasov, V. S.

G71

TITLE: Crystal structure of certain binary intermetallic compounds of rhenium

SOURCE: Vsesoyuznoye soveshchaniye po probleme reniya. 2d, Moscow, 1962. Reniy
(Rhenium); trudy soveshchaniya. Moscow, Izd-vo Nauka, 1964, 180

TOPIC TAGS: rhenium, scandium, rhenium scandium compound, rhenium iron compound,
rhenium aluminum compound, rhenium rich compound, compound structure

ABSTRACT: An investigation of the structure of the rhenium-rich Sc-Re alloys revealed intermetallic compounds: ScRe_2 with a MgZn_2 -type crystal structure and $\text{Sc}_5\text{Re}_{24}$ with a $\text{Ti}_5\text{Re}_{24}$ -type structure. In the Re-Fe alloys, in addition to the known Re_2Fe_3 compound and a compound with an α -Mn structure, there is a third compound of about Re_3Fe composition, which has a β -Mn structure. The rhenium-richest compounds in the rhenium-scandium and rhenium-aluminum systems have a structure similar to α -Mn. The structure of rhenium-rich Re_3Fe_2 is similar to β -Mn. Compounds with a low rhenium content have a structure corresponding to that of the compounds of transition metals located in the periodic system close to rhenium (ScRe_2 - ScOs_2 , ReAl_{12} - WAl_{12}). [ND]

Carc 1/2

L 23933-65
ACCESSION NR: AT5002777

ASSOCIATION: none

SUBMITTED: 05Aug64

ENCL: 00

SUB CODE: MM, SS

NO REF SOV: 003

OTHER: 001

ATD PRESS: 3177

Card 2/2

ACCESSION NR: AP4006584

S/0021/63/000/004/0492/0495

AUTHOR: Kry*p'yakevy*ch, P. I.; Kuz'ma, Yu. B.; Protasov, V. S.

TITLE: Crystal structure of compounds in scandium-rhenium system

SOURCE: AN UkrRSR. Dopovidi, no. 4, 1963, 492-495

TOPIC TAGS: scandium rhenium system, scandium rhenium compound, crystal structure, crystal lattice, scandium rhenium alloy

ABSTRACT: Two compounds were found in the scandium-rhenium system by x-ray diffraction studies with a Debye camera. These were: ScRe_2 (MgZn_2 structure, with $a = 5.271 \pm 0.002 \text{ \AA}$, $c = 8.592 \pm 0.004 \text{ \AA}$, $c/a = 1.630$) space group $P63/mmc-D_{6h}^4$ and $\text{Sc}_3\text{Re}_{24}(\text{Ti}_3\text{Re}_{24})$ structure, with $a = 9.65 \text{ \AA}$, space group $I\ 43m - T^3d$)

In slowly cooled alloys the latter compound exists in equilibrium with Re. An earlier hypothesis that this system should be analogous to the systems Zr-Re and Hf-Re (due to the close values of atomic radius for Sc, Zr, and Hf) in the regions of high Re content was fully verified.

ASSOCIATION: L'vivsky* derzhavny*y universy*tet (L'vov State University)

SUBMITTED: 19May62

DATE ACQ: 03May63

ENCL: 00

Card SUB CODE: ML

NO REF SOV: 003

OTHER: 002

KRIPYAKEVICH, P.I.; PROTASOV, V.S.; CHERKASHIN, Ye.Ye.

Crystalline structure of the ZrFe₃ compound. Zhur. neorg. khim.
10 no.1:288-290 Ja '65. (MIRA 18:11)

1. L'vovskiy gosudarstvennyy universitet imeni Franko.

DVORINA, L.A.; PROTASOV, V.S.; GLADYSHEVSKIY, Ye.I.

Scandium monosilicide and its crystalline structure. Izv. AN SSSR.
Neorg. mat. 1 no.5:711-714 My '65. (MIRA 18:10)

1. Lvovskiy ordena Lenina gosudarstvennyy universitet imeni
Franko i Institut problem materialovedeniya AN UkrSSR.

ZHIRYAKOV, B.M.; LARKIN, A.I.; PROTASOV, Ye.A.

Study on permanent magnets. Zav. lab. 31 no.8;1C22-1023 '65.

(MIRA 18:9)
1. Moskovskiy inzhenerno-fizicheskiy institut.

REBROV, N.I.; TROTASOV, Ye.N.; KOSTIN, M.I.

Branch mine conveyor lines as an objec of remote control.
Nauch. trudy KNIUI no.15:63-83 '64. (MIRA 18-3)

REBROV, N.I.; PROTASOV, Ye.N.

Some problems in the theory and calculation of frequency relays
on a series resonance circuit. Nauch. trudy KNIUI no.15;
83-97 '64.
(MIRA 18:8)

L 36655-65 EWT(1)/EWT(m)/EFF(n)-2/T/EWP(t)/EWP(b)/EEC(b)-2/SEA(c) P-4
ACCESSION NR: AP5002807 TIP/c S/0078/65/010/001/0288/0290
JD/WW/JG 33

AUTHOR: Kripyakevich, P. I.; Protasov, V. S.; Cherkashin, Ye. Ye.

TITLE: The crystal structure of the compound ZrFe₃ 23

SOURCE: Zhurnal neorganicheskoy khimii, v. 10, no. 1, 1965, 288-290

TOPIC TAGS: zirconium iron sub 3, zirconium sub 6 iron sub 23, crystal structure

ABSTRACT: The composition of ZrFe₃ described by V. N. Svechnikov, V. M. Pan, A. Ts. Spektor (Zh. neorgan. khimii, 8, 2148 (1963)) as a cubic face-centered material with Ti₂Ni or W₃Fe₃C (η -phase) structure was reviewed. The Th₆Mn₂₃ and Ti₂Ni type structures were believed more probable, and the intensity of the X-ray lines was calculated on this basis. The line intensities corresponded best to the Th₆Mn₂₃ type structure (space group Fm3m-O_h⁵). Causes for the discrepancy between the composition of ZrFe₃ and the ideal Zr₆Fe₂₃ were proposed. Values for the density and the number of atoms per unit cell approach those calculated theoretically if the composition were assigned the formula Zr₆Fe₂₃. The authors conclude that the compound ZrFe₃ does not belong to Card 1/2

L 36655-65

ACCESSION NR: AP5002807

the type η - phase. Orig. art. has: 1 table

ASSOCIATION: L'vovskiy gosudarstvenny*y universitet im. I. Franko (Lvov
State University)

SUBMITTED: 10Apr64

ENCL: 00

SUB CODE: MM

NR REF Sov: 001

OTHER: 003

Card 2/2

L 20350-03
BD/RM/DJ

EPP(c)/EWT(m)/BDS/ES(s)-2 AFFTC/AFGC/SSD Pt-4/Pr-4

ACCESSION NR: AT3002011

S/2664/61/000/000/0340/0347

AUTHORS: Obleukhova, O. S.; Protasov, V. V.; Trubinskaya, R. A.

TITLE: The testing of oils with additives on engines and mechanisms, and practical experience therewith. Effect of engine-oil additives on the pitting of hydraulic valve lifters.

SOURCE: Priendki k maslам i toplivam; trudy nauchno-tehnicheskogo soveshchaniya. Moscow, Gostoptekhizdat, 1961, 340-347.

TOPIC TAGS: lubricant, lubrication, additive, valve, lifter, valve lifter, hydraulic, pitting, oil, ZIL-110, ZIL-111, DF-11, SB-3, AzNII, TsLATIM-339, VNII NP-360 IP-22, PMS_{Ya}, sulfonate, dialkyldithiophosphate, Zn, Ba, primary, P, octyl, alcohol, 2-ethylhexyl, isobutyl, Shell, Esso, Castrol.

ABSTRACT: The paper describes tests performed with ZIL-110 and ZIL-111 engines to determine the effect of oil additives on the pitting of hydraulic valve lifters. 24- and 50-hr tests were performed to obtain data comparable with tests of the same duration performed and reported in the USA. The tests were run at varying rpm's, with valve spring loads of 75 and 130 kg. The oils tested were industrial 50 and DS-8 without additives and with additives TsLATIM-339, VNII NP-360,

Card 1/3

L 20356-63

ACCESSION NR: AT3002011

IP-22, PMS_{v.}, and the Ba and Zn dialkyldithiophosphates DF-1 and DF-5 et al., including 30HD Shell, Esso, Castrol, and Wakefield CR-30. The tests showed that the pitting of valve lifters made of white iron actuated by a steel camshaft depends greatly on the quality of the oil employed. This is attributed to the contribution of the detergent components of the additives to the appearance of corrosion fatigue in the metal. The additive that is most effective in counteracting pitting of the valve lifters is DF-11, a Zn dithiophosphate prepared from primary octyl alcohol (2-ethylhexyl) mixed with isobutyl alcohol (Institut neftekhimicheskogo sinteza AN SSSR/ Institute of Petrochemical Synthesis, AS, USSR). A 2% addition of this additive is introduced into the oil as referred to a 0.1% Zn and P content in the oil. Sulfonate and alkylphenolic additives must be introduced into the oil to obtain satisfactory detergent qualities. Satisfactory qualities of the oil relative to the overall requirements (detergent, antiwear, and anticorrosion properties) are obtained through the following additive composition: (a) 3% low-ash sulfonate AzNII with 2% DF-11; (b) 3% sulfonate additive SB-3 with 2% DF-11. The method of 24- and 50-hr engine tests permits the selection of optimal additive specimens that inhibit pitting on the valve lifters and affords a comparative evaluation of the quality of the metal that is to be employed in the making of the valve lifters. Orig. art. has 4 figures and 2 tables.

Cord 2/3

L 20356-63

ACCESSION NR: AT3002011

ASSOCIATION: Moskovskiy avtozavod im. I. A. Likhacheva (Moscow Automobile Plant)

SUBMITTED: 00 DATE ACQ: 23Jan63 ENCL: 00

SUB CODE: FL, CH, EL NO REF SOV: 000 OTHER: 000

Card 3/3

MATESHUK, V.P., professor, zaveduyushchiy; PROTASOV, V.Ya.

Transfusion of arterialized blood. Vest.khir. 73 no. 11:19-21 Jl-ag '53.
(MLP 6:8)

1. Fakul'tetskaya khirurgicheskaya klinika Yaroslavskogo gosudarstvennogo
meditsinskogo instituta.
(Blood--Transfusion)

PROTASOV, Vladimir Yefimovich; DEMCHUK, M., red.; BURKATOVSKAYA, TS.
[Burkatovs'ka, TS.], tekhn. red.

[Cost of production in collective farms and how to reduce it]
Sobivartist' produktsii kolhospiv i shliakhy ii znyzhehnia.
L'viv, Knuzhkovo-zhurnal'ne vyd-vo, 1961. 50 p. (MIRA 14:11)
(Collective farms--Costs)

KARMINSKIY, D.E., prof., doktor tekhn.nauk; TEGKAYEV, Kh.N., dotsent,
kand.tekhn.nauk; PROTASOV, V.Z., inzh.; VIKTOROV, I.V., laborant

"Study of the stresses in the frame and body of TE-3 diesel
locomotives." [Sbor.trud.] RIIZMT no.32:59-96 '61. (MIRA 16:12)

GLEBOV, V.A., kand. tekhn. nauk, dotsent; PROTASOV, V.Z.

Effect of a machine on the operating indices of an electric
motor. Sbor. st. RIIZHT no.45:82-85 '64. (MIFI 19:1)

PROTASOV, V.Z.

Special features of the testing of high-frequency motors of
shearing machines. Sbor. st. RIIZHT no.45:86-94 '64.

Tensiometric studies of the strength and stability of loco-
motive hulls. Ibid.:108-123 (MIRA 19:1)

REBROV, N.I.; PROTASOV, Ye.N.

Branched mine conveyer lines as an object of automation,
Nauch. trudy KNIUI no. 11:181-186 '62. (MIRA 17:7)

S/194/62/000/004/010/105
D222/D309

AUTHORS: Rebrov, N. I., Protasov, Ye. N. and Platonov, S. K.

TITLE: Industrial batch testing of the $\pi\gamma K-2$ (RUK-2) speed relay

PERIODICAL: Referativnyy zhurnal, Avtomatika i radioelektronika, no. 4, 1962, abstract 4-2-7p (V sb. Vopr. mekhaniz. i avtomatiz. v gorn. prom-sti (KNIUI, no. 8), M., 1961, 340-349)

TEXT: The relay described is intended for the control of scraper conveyers in mines. The construction of this relay is based on the principle of magnetic coupling of the pickup with the scraping unit of the conveyer. The elements of the relay are enclosed in the explosion-proof casing of the control and monitoring system. The pickup has two coils with permanent magnets, placed at 240 mm from each other and connected in series, enclosed in a single housing with a single plug-type cable connector. The weight of the pickup is 10 kg. The shortcomings found in industrial testing of the relay

Card 1/2

Industrial batch testing ...

S/194/62/000/004/010/105
D222/D309

are stated and the necessary measures to eliminate them in mass production are indicated. The electrical circuit for connecting the relay to a control and monitor system, and the mounting of the pickup on the intermediate chute of a CKP-11(SKR-11) conveyer are described. A two-conductor circuit is given for the remote control, of a scraper conveyer with the RUK-2 apparatus. 4 figures. 2 tables. 8 references. Abstracter's note: Complete translation.

Card 2/2

DOBRETSOV, V.B.; PROTASOV, Yu.I.

Study of the electric resistance of rocks and minerals at low temperatures. Izv. AN SSSR. Fiz. zem. no.4:102-103 '65.

(MIRA 18:8)

1. Moskovskiy institut radioelektroniki i gornoj elektromekhaniki.

VEREM'YEV, V.M., kand. tekhn. nauk; PROTASOV, Yu.I., inzh.

Study of the frequency and temperature relationship of the
dielectric constant of minerals and rocks. Nauch. soob. IGD
20:118-122 '63. (MIRA 16:10)

(Electric prospecting)

KUZYAYEV, L.S.; PROTASOV, Yu.I.

Measuring the surface temperature of rocks in thermal boring. Inzh.-fiz.
zhur. 7 no.9:10-13 S '64. (MIRA 17:12)

1. Institut radioelektroniki i gornoy elektromekhaniki, Moskva.

RZHEVSKIY, V.V., prof., doktor tekhn. nauk; PROTASOV, Yu.I., kand. tekhn. nauk; DOBRETSOV, V.B., gornyy inzh.

Low frequency breaking of rock. Gor. zhur. no.4:37-39 Ap '65.
(MIRA 18:5)
1. Moskovskiy institut radioelektroniki i gornoj elektromekhaniki.

PROTASOVA, A.F.

Multilocular echinococcosis (alveococcosis) in Kirov
Province; author's abstract. Med. paraz. i paraz. bol. 34
no.2:230-231 Mr-Ap '65. (MIRA 18:11)

ALI-ZADE, M.M.; PROTASOVA, A.F.

Clinico-morphological parallels in thyrotoxicosis. Probl. endokr. gormonoter. 9 no.4:72-78 Jl-Ag'63 (MIRA 17:1)

1. Iz khirurgicheskogo i patologoanatomiceskogo otdeleniya Kirovskoy oblastnoy klinicheskoy bol'nitsy (glavnyy vrach V.N.Potapenko, nauchnyy rukovoditel' raboty - doktor medtsinskikh nauk N.S.Yepifanov).

FROSTASOVA, A. M.

Inst. Combustible Minerals, Acad. Sci. USSR (-1946-)

"The Investigation of Anthiacene Oil of the Pyrolysis of Petroleum Products."

Iz. Ak. Nauk, Otdel Tekh. Nauk, No. 4, 1946

Ред. И. А. А. А. 1/10

FLIN, R.N.; PROTASCOVA, A.N.; TR. XITENING, Ye.A.

Catalytic reaction of simple ethers with carboxylic acids. Zhur. obshch. khim.
27 no.6:1460-1465 Je '57. (VINITI 10:8)
(Ether) (Acids, Fatty)

ACC NR: AP6030568

SOURCE CODE: UR/0413/66/000/016/0035/0035

INVENTOR: Bliznyuk, N. K.; Kolomyets, A. F.; Strel'tsov, R. V.; Varshavskiy, S. L.; Libman, B. Ya.; Protasova, L. D.

ORG: none

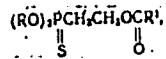
TITLE: Preparation of O,O-dialkyl S-(β -acyloxy)ethyl thiophosphates. Class 12, No. 184865. [announced by the All-Union Scientific Research Institute of Phytopathology (Vsesoyuznyy nauchno-issledovatel'skiy institut fitopatologii)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 16, 1966, 35

TOPIC TAGS: pesticide, dialkylacetoxyethyl thiophosphate, PHOSPHATE

ABSTRACT:

To obtain O,O-dialkyl S-(β -acyloxy)ethyl thiophosphates of the general formula:



(where R is a lower alkyl, R' is an alkyl, substituted alkyl, aryl, or substituted aryl), dialkyl chlorophosphates are treated with β -mercaptoethyl carboxylates in the presence of HCl acceptors, e.g., tertiary amines. [WA-50; CBE No. 11]

SUB CODE: 07/ SUBM DATE: 28Jul65

Card 1/1

UDC: 547.419.1.07

NASYROVA, Sh.I.; PROTASOVA, M.A.

Efficient method for dampening leathers for footwear uppers.
Leg.prom. 18 no.6:44 Je '58. (MIRA 12:10)
(Leather)

PROTASOVA, M.A., inzhener; STRAKHOV, I.F., professor.

Studying the tanning properties of dry chrome extracts, Leg.prom.
17 no.6:27-29 Je '57. (MLPA 10:8)
(Tanning materials)

"APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R001343320008-7

PROTASOVA, M.G.,
KANDROR, I.S., J. Physiol. 26, 650-6 (1939)

APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R001343320008-7"

"APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R001343320008-7

BARANOVSKAYA, I.A.; LITMANOVICH, A.D.; PROTASOVA, M.S.; ESKIN, V.Ye.

Heterogeneity of the composition of styrene-methyl methacrylate co-polymers. Vyssokomol. soed. t. no.8(1971) Ag '64. (MIRA 1971)

APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R001343320008-7"

BARANOVSKAYA, I.A.; LITMANOVICH, A.D.; PROTASOVA, M.S.; ESKIN, V.Ye.

Composition inhomogeneity of statistical styrene-methacryl methacrylate copolymers. Vysokomol soed. 7 no.3:509-512 Mr '65.

(MIRA 18:7)

1. Institut vysokomolekulyarnykh soyedineniy AN SSSR i Institut neftekhimicheskogo sinteza AN SSSR.

L-20788-55 EWT(m)/EPF(c)/EPR/EWP(j)/T Pe-l/Pr-l/Ps-l RPL RM/WW

ACCESSION NR: AP5003802

S/0190/64/006/008/1541/1541

AUTHOR: Barinovskaya, I. A.; Litmanovich, A. D.; Eskin, V. Ye.; Protasova, M. S.

TITLE: Composition heterogeneity of styrene methyl methacrylate copolymers

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 6, no. 8, 1964, 1541

TOPIC TAGS: macromolecular chemistry, polystyrene, acrylic plastic B

ABSTRACT: The applicability of the inhomogeneity criterion Q/Q_{\max}^0 (Q_{\max}^0 is the maximum inhomogeneity corresponding to a mixture of A and B homopolymers with $M_A = M_B = M_W$) in the case of $P \neq 0$ was investigated. The dependence of Q_{\max}/Q_{\max}^0 on P/P_{\max} was studied for two cases: $P > 0$ and $P < 0$, indicating that the difference between Q_{\max} and Q_{\max}^0 must be considered when $P/P_{\max} > 0.1$ (for $P > 0$). The degree of composition inhomogeneity of Q/Q_{\max}^0 of samples of statistical copolymers of styrene with methyl methacrylate, produced at 60° under various conditions: in bulk, in benzene solution, in the case of different compositions of the initial mixture of monomers, and within a broad range of degrees of conversion, was studied by

Card 1/2

L 20788-65

ACCESSION NR: AP5003802

the light-scattering method. The inhomogeneity found (especially for samples synthesized at low degrees of conversion) exceeded that calculated on the basis of kinetic concepts by one to two orders of magnitude.
Orig. art. has: 2 formulas, 1 graph.

ASSOCIATION: none

SUBMITTED: 20Feb64

ENCL: 00

SUB CODE: OC, GC

NO REF Sov: 000

OTHER: 002

JFRS

Card 2/2

PROTASOVA, N.N.; SAMYGIN, G.A.

"A course in the photoculture of plants" by V.M.Leman. Reviewed by
N.N.Protasova, G.A.Samygin. Fiziol. rast. 9 no.5:654-655 '62.
(MIRA 15:10)

(Plants, Effect of light on) (Leman, V.M.)

PROTASOVA, N. N.

Dissertation: "The Use of Artificial Illumination in Raising Cucumber and Tomato Seedlings." Cand Biol Sci, Inst of Plant Physiology imeni K. A. Timiryazev, Acad Sci USSR, Moscow, Oct-Dec 53. (Vestnik Akademii Nauk, Moscow, Jun 54)

SO: SUM 318, 23 Dec 1954

BUTENKO, R.G.; NICHIPOROVICH, A.A.; PROTASOVA, N.N.

Physiological activity of the products of photosynthesis in plants exposed to light of different spectral composition. *Fisiol. rast.* 8 no.2:153-160 '61. (MIRA 14:3)

I. K. A. Timiriazev Institute of Plant Physiology, U.S.S.R., Academy of Sciences, Moscow.
(Photosynthesis)